ABANDONED HARDROCK MINE LANDS

ISSUE SUMMARY:

Abandoned mine lands (AMLs) can have an adverse effect on human health and the environment, primarily through water and soil contamination arising from uncontrolled acid mine drainage; they also can pose physical hazards. While there is no comprehensive national inventory of hardrock AMLs across the country, many agencies have estimated a range of several hundred thousand sites nationwide; only a small percentage of these are under EPA's purview. Addressing AML sites can result in some of the most costly and complex cleanup actions that governments undertake.

UPCOMING MILESTONES:

- EPA is developing a best practices guidance document for conducting Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) response actions at abandoned mine sites. This document will focus on recommendations to prevent sudden fluid releases due to failures at abandoned mine impoundments. The Agency anticipates finalizing this document in late 2020 or early 2021.

BACKGROUND:

EPA estimates that there are approximately 500 mining sites with some connection to the Superfund program, including 140 mining sites on the Superfund National Priorities List (NPL).

There is no overarching regulatory authority or other organization to oversee and to regulate all aspects of hardrock mining. The absence of such authority adds to the challenge of addressing these generally remote and sometimes very large sites. If left unabated, these sites will continue to pose safety, environmental and human health risks.

Regulation of mining's environmental impacts is a responsibility shared among federal agencies as well as with states, tribes, local governments and private landowners. This dispersed disparate regulatory framework makes it difficult to prioritize and to address these sites on a national level.

The primary challenge in addressing these sites is a lack of reliable funding, which not only impedes site cleanup but also makes efforts to inventory, prioritize and to characterize mining sites difficult. These sites, a majority of which have been abandoned for decades or in some cases more than a century, will take substantial time to address. Also, due to the presence of naturally occurring contamination, and EPA's policy to generally not clean sites up below background, realistic cleanup goals will reflect elevated contamination levels based on background. Agencies also need to consider regulatory and programmatic flexibilities when addressing these sites.

EPA participates in the Federal Mining Dialogue (FMD) with the U.S. Army Corps of Engineers and several Department of Interior offices (e.g., the Bureau of Land Management, Office of Surface Mining Reclamation and Enforcement, and Bureau of Indian Affairs), the U.S. Department of Agriculture's U.S. Forest Service and the Department of Energy. The FMD has formed a subcommittee to share individual agencies' mine site inventories on federal lands as well as EPA-tracked Superfund-related mining sites. The subcommittee is exploring ways to assemble a comprehensive national AML inventory to capture sites tracked by other federal entities and EPA's Superfund program. FMD members are using their individual, existing resources to focus first on mitigating risks

associated with known hazardous site conditions. One possible approach under consideration entails EPA partnering with the U.S. Geological Survey (USGS) to build on the latter's national land mine inventory, which includes AML sites, to develop state-by-state inventories. Additionally, the FMD has formed a best practices subcommittee to share AML characterization and remediation lessons learned.

KEY EXTERNAL STAKEHOLDERS:

☒ Congress ☒ Industry ☒States ☒ Tribes ☒ Media ☒ Other Federal Agency
☒ NGO ☒ Local Government ☐ Other (name of stakeholder) _____

Concerns include acid mine drainage impacts on water quality and the potential risk of uncontrolled mine water releases. In addition, the magnitude, risk, complexity and costs associated with addressing the abandoned mine universe require a collaborative effort between federal, state and tribal governmental agencies; industry; and environmental organizations. We anticipate continued congressional and press interest on hardrock mining issues.

MOVING FORWARD:

EPA recently created the Office of Mountains, Deserts and Plains, which will work with other EPA offices, other federal agencies, states, tribes, and other stakeholders to address abandoned Western hard rock mine sites. The office will employ innovative scientific, technical and programmatic-based approaches to facilitate timely, effective and less costly cleanup and reuse of these sites. It will also work to remove barriers to Good Sam AML cleanups.

EPA recently signed a site-specific redelegation of CERCLA authority, from EPA to the U.S. Forest Service, for the cleanup at the Matterhorn Mill Site in Colorado. This non-NPL site is an historic mill surrounded by mine waste tailings and largely located on U.S. Forest Service-managed land. This site-specific redelegation of CERCLA authority is consistent with EO 12580 Redelegation Authority and follows EPA delegation 14-46 signed by Administrator Wheeler on September 1, 2020.

EPA plans to continue leveraging federal efforts to develop a comprehensive site inventory, to prioritize sites for characterization and cleanup and to identify or implement cost-effective cleanup technologies. The federal agencies will continue to work with state and tribal counterparts to develop inventories of AML sites on their lands; develop efficient, cost-effective characterization techniques and cleanup approaches; and share information, educate, and manage cleanup expectations about AML sites located in highly mineralized mining districts and watersheds across the country. EPA will continue its efforts to streamline the process to encourage reuse and re-mining of AML sites, waste piles and mine-influenced water in order to recover valuable metals and offset some cleanup costs.

LEAD OFFICE/REGION: OLEM

OTHER KEY OFFICES/REGIONS: OW, OECA, ALL TEN REGIONS WITH EMPHASIS ON REGIONS 6-10